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NLK (D9X3C) Rabbit mAb**Cell Signaling**
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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H M R	Endogenous	58	Rabbit IgG	#Q9UBE8	51701

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

NLK (D9X3C) Rabbit mAb recognizes endogenous levels of total NLK protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human NLK protein.

Background

Nemo-like kinase (NLK) is a serine/threonine-protein kinase that regulates multiple signaling pathways, including Wnt/β-catenin, TGFβ, IL-6, and Notch (1-4). NLK contributes to cell proliferation, differentiation, cell fate determination during early embryogenesis and nervous system development in vertebrates (5-7). Recent studies showed that NLK is aberrantly expressed in various types of cancer where it regulates cancer cell proliferation, migration, invasion and survival (8-11). NLK is localized predominantly in nucleus and at a lower level in cytoplasm (12). Homodimerization of NLK is required for its activation and nuclear localization. NLK is activated via intermolecular autophosphorylation at Thr286 (13). NLK interacts with and phosphorylates a number of transcription factors including FOXO1, FOXO4, MYB, NOTCH1 and TCF7L2/TCF4, and LEF-1/TCF (14-18). NLK also associates with E3 ubiquitin ligase NARF and Raptor and regulates their function (19,20).

Background References

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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key**WB:** Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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